**How Does Variation Help A Species To Survive?**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_** Due date: GRB:5th, O:6th, YHig:7thMay.

**Assessment**

Your task is to produce a piece of work that explains how genetic variation helps a species to survive. In this piece of work you can choose which species you focus on and you can look at one or more trait. Some times the promotion of a particular trait in a species is to combat human intervention and you should comment on whether this is the case for your chosen example. Your work should be attractive, typed, printed and include a correctly cited relevant copyright free image.

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| **Assessment area** | **self** | **teacher** |
| The piece of work is typed, printed, attractive, contains student name and suitable title and is turned in on time. (2) |  |  |
| A relevant copyright free image is included and cited correctly. (2) |  |  |
| The species and trait(s) are clearly stated and different scenarios are considered. For each scenario the effect this has on the variation of the population at the start and end and any selective advantages given are discussed. (4) |  |  |
| The writing is interesting, in the student’s own words with good spg. (1) |  |  |
| The impact of humans on the example is considered. (1) |  |  |
| Total (10) |  |  |

**Background Information**

1. Watch the brainpop on “Charles Darwin” and take the quiz.

*Login: acsuk, password: acsschools. (you can download the app on your ipad)*

The brain pop on “Natural Selection” covers similar material with different examples.

2. Watch the twig movie on “Antibiotic resistance.” Write three sentences in your book explaining how humans have influenced antibiotic resistance.

2. Carry out the lab to demonstrate natural selection in action, “Survival through time” launch lab on page 271 of the textbooks. Write 2-3 sentences explaining how this demonstrates natural selection in action. 5.

1. Carry out the “changing species” lab from page 287 of the textbook and answer the “conclude and apply” questions on the page.
2. Now research one of the suggested ideas below or your own idea to gain the information you need for your piece of writing.

**Suggested Topics:**

These are suggestions only, you can use your own ideas.

1. Antibiotic resistance of bacteria.
2. Darwin’s finches.
3. The rise of the number of tuskless elephants in recent years.
4. Peppered moths and pollution.